
NIKHEF/Nijmegen analysis farm

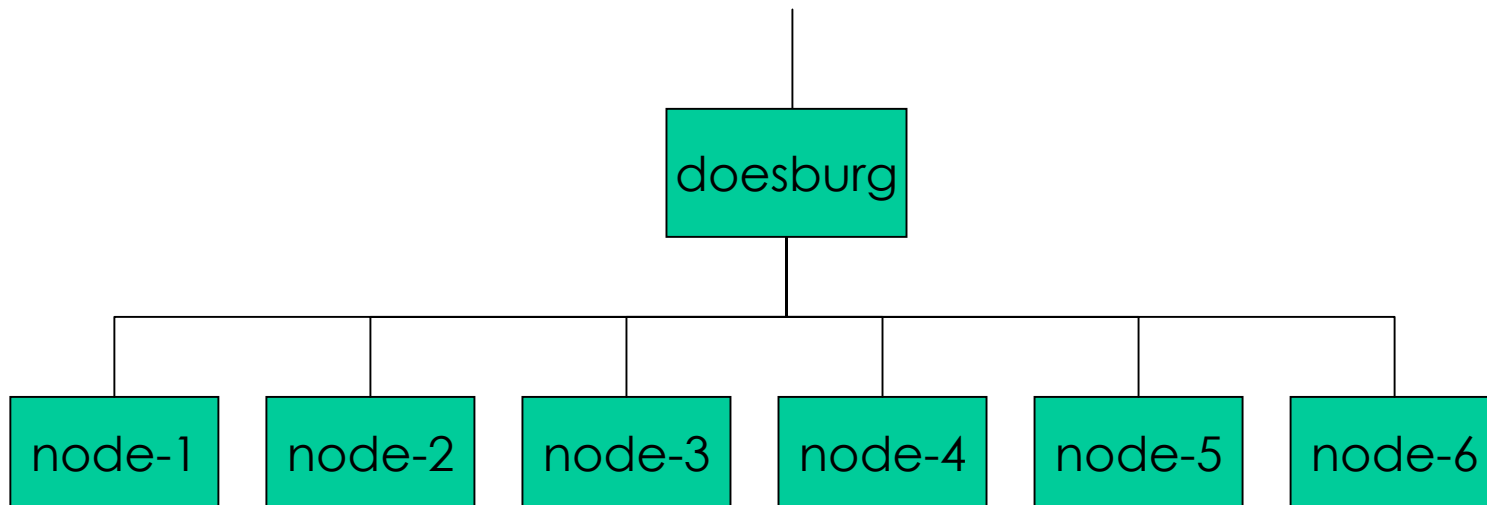
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Nijmegen analysis

- About 5 persons working from Europe
 - τ ID ($Z \rightarrow \tau\tau$)
 - b ID (QCD b production)
- Relatively high-statistics analyses
 - Would like to be less dependent on computing resources at FNAL
- Moderate sized farm
 - Started off copying setup from NIKHEF (Amsterdam)
 - N.B. Goals are different:
 - Amsterdam: MC production (store files into SAM)
 - Nijmegen: analysis (retrieve files from SAM)

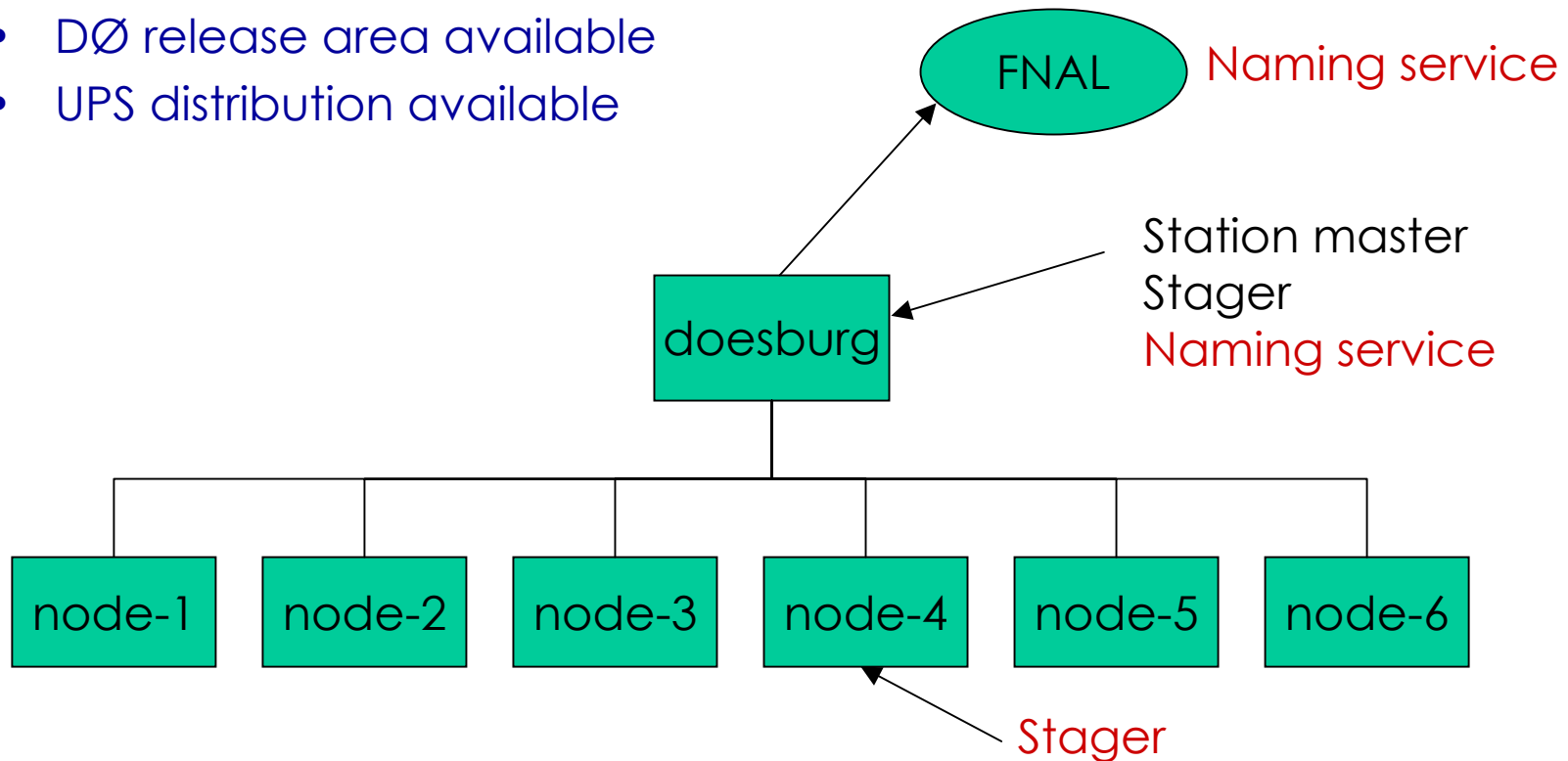
Configuration: system

- Server: “standard” RH7.1, kernel 2.4.9-21, 930 MHz
- 6 dual CPU nodes: tftpboot sector, RH7.2, kernel 2.4.9-31, 930 MHz
- Private network
 - Presumably for security reasons... copied this from Amsterdam



Configuration: user s/w

- PBS (straight copy of RPM from ClueDØ) with **sam_lo**, **sam_hi** queues
- **SAM**: nice work by Sinisa Veseli to resolve VPN issue:
 - Nodes registered with domain name d0farm.nijmegen
 - 50 GB SAM cache on server
 - 30 GB SAM cache on each node
- DØ release area available
- UPS distribution available



Status and prospects

- Contents of `doesburg_server_list.txt`:

```
nameservice ns_prd v3_3_4r -ORBtrace_level 5      (2nd naming service,  
necessary so that farm nodes know how to talk with the Station Master)  
logger log_prd v4_2_0 -stdout=no -info=/dev/null -host-alias=d0-server  
(2nd log server, just debug information)  
station station_prd v4_2_0_3 nijmegen -constrain-delivery=doesburg.hef.kun.nl  
--preferred-loc=d0mino -min-delivery=1k -max-prefetched-files=5 -revival=fast  
--route=enstore\\d0mino.fnal.gov  
fss station_prd v4_2_0_3 nijmegen  
stager station_prd v4_2_0_3 nijmegen -with-fss -without-sm -max-transfers=7  
bbftp station_prd v4_0_0_f1_9_4
```

- Contents of `doesburg_worker_server_list.txt` (node-x_server_list.txt a symbolic link to this file):

```
stager station_prd v4_2_0_3 nijmegen -without-fss -with-sm -max-transfers=1
```

- See Sinisa's detailed e-mail (May 29) to sam-admin

Status

- Files can be delivered to the nodes
 - Both from SAM caches and from tape
 - Both “getroot” scripts and scripts calling framework executables
 - In the latter case, need to “setup sam -q batch_prd” in order for the nodes to talk to the correct naming service
- Expect 1 Gbit/s connection to outside world ~several months
- Amount of disk space
 - Will buy new server with 2 TByte of disk space attached
 - Replace doesburg
- The near future:
 - Really start doing analysis!
 - Intend to try and store files into SAM soon
 - According to Sinisa: possible right now from server (not from nodes)
 - Would like to be able to (re-)run d0reco
 - Needs DB access \Rightarrow private network an issue
 - Sinisa says it should not be difficult to implement this in fashion similar to Naming Service